

Title (en)
Semiconductor package with improved testability

Title (de)
Halbleiterpaket mit verbesserter Prüfbarkeit

Title (fr)
Boîtier semi-conducteur doté d'une testabilité améliorée

Publication
EP 2624288 A3 20160420 (EN)

Application
EP 12006188 A 20120831

Priority
US 201213362344 A 20120131

Abstract (en)
[origin: EP2624288A2] An exemplary implementation of the present disclosure includes a testable semiconductor package (100) that includes an active die (102) having interface contacts (112a-112c) and dedicated testing contacts (114a, 114b). An interposer (104) is situated adjacent a bottom surface (116a) of the active die (102), the interposer (104) providing electrical connections between the interface contacts (112a-112c) and a bottom surface (118a) of the testable semiconductor package. At least one conductive medium provides electrical connection between at least one of the dedicated testing contacts (114a, 114b) and a top surface (118b) of the testable semiconductor package. The at least one conductive medium can be coupled to a package-top testing connection (108a, 108b), which may include a solder ball.

IPC 8 full level
H01L 21/66 (2006.01); **H01L 21/56** (2006.01); **H01L 23/31** (2006.01); **H01L 23/498** (2006.01)

CPC (source: EP KR US)
H01L 21/561 (2013.01 - EP US); **H01L 22/00** (2013.01 - KR); **H01L 22/32** (2013.01 - EP US); **H01L 23/3128** (2013.01 - EP US); **H01L 23/48** (2013.01 - KR); **H01L 23/49811** (2013.01 - EP US); **H01L 23/49827** (2013.01 - EP US); **H01L 23/49833** (2013.01 - EP US); **H01L 24/16** (2013.01 - EP US); **H01L 2224/131** (2013.01 - EP US); **H01L 2224/16225** (2013.01 - EP US); **H01L 2224/16227** (2013.01 - EP US); **H01L 2224/97** (2013.01 - EP US); **H01L 2225/1023** (2013.01 - EP US); **H01L 2225/1041** (2013.01 - EP US); **H01L 2225/1058** (2013.01 - EP US); **H01L 2924/15192** (2013.01 - EP US); **H01L 2924/1533** (2013.01 - EP US); **H01L 2924/15331** (2013.01 - EP US)

C-Set (source: EP US)
1. **H01L 2224/97** + **H01L 2224/81**
2. **H01L 2224/131** + **H01L 2924/014**

Citation (search report)
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• [YA] US 2008136003 A1 20080612 - PENDSE RAJENDRA D [US]
• [Y] US 2009140364 A1 20090604 - ISHIHARA MASAMICHI [JP]
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• [A] US 2010009473 A1 20100114 - MIZOGUCHI OSAMU [JP]
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• [A] US 2011304015 A1 20111215 - KIM YONG-HOON [KR], et al

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2624288 A2 20130807; **EP 2624288 A3 20160420**; **EP 2624288 B1 20190821**; CN 103227166 A 20130731; CN 103227166 B 20161123; CN 202816935 U 20130320; KR 101356408 B1 20140127; KR 20130088717 A 20130808; TW 201332069 A 20130801; TW I497662 B 20150821; US 2013193996 A1 20130801; US 9153507 B2 20151006

DOCDB simple family (application)
EP 12006188 A 20120831; CN 201210365269 A 20120926; CN 201220498162 U 20120926; KR 20120106958 A 20120926; TW 101133338 A 20120912; US 201213362344 A 20120131